



CATALOGUE NO. 6330.0

EMBARGOED UNTIL 11.30 A.M. 18 JULY 1984

### OVERTIME, AUSTRALIA, MAY 1984

**PHONE INQUIRIES** *for more information about these statistics*—contact Robert McCombe on Canberra (062) 52 6577 or any of our State offices.

*other inquiries including copies of publications*—contact Information Services on Canberra (062) 52 6627 or in any of our State offices.

**MAIL INQUIRIES** *write to* Information Services, ABS, P.O. Box 10, Belconnen, A.C.T. 2616 or any of our State offices.

#### MAIN FEATURES

**NOTE:** *The results of the overtime surveys conducted since November 1983 are not strictly comparable with those of previous surveys. See paragraphs 2, 3 and 4 below.*

The average weekly overtime hours worked in the May 1984 survey week was 1.11 hours per employee compared with 1.05 hours per employee in the February 1984 survey week.

Average weekly overtime hours worked by employees actually working overtime in the survey week in May 1984 was 6.71 hours. This was virtually unchanged from the February 1984 estimate.

Average overtime hours per employee working overtime in the survey week was highest in the N.T. (8.32 hours) followed by Victoria (7.14 hours).

#### EXPLANATORY NOTES

##### Introduction

1. This publication contains results of a new sample survey first introduced in November 1983. The survey, which is conducted by telephone obtains from employers information on overtime in respect of the last pay period ending on or before the third Friday of the middle month of the calendar quarter.

2. The new sample survey is based on the ABS register of businesses and replaces the survey based on a sample selected from lists of employers subject to payroll tax and lists of government organisations and hospitals.

3. Background information for the introduction of the new survey is provided in *Information Paper: New Statistical Series: Employment, Average Weekly Earnings, Job Vacancies and Overtime* (6256.0) issued on 21 June 1984.

4. Because of the substantially improved coverage of employers provided by the ABS register and a new and larger sample, results from the new survey are not comparable with previous surveys and no attempt has been made to revise the old series. Nevertheless, to provide a relationship between the old and new series, estimates for November 1983, obtained from the old and new surveys, are presented in this publication.

##### Scope of the survey

5. All wage and salary earners are represented in the survey, except:

- (a) members of the Australian permanent defence forces;
- (b) employees of enterprises primarily engaged in agriculture, forestry, fishing and hunting;
- (c) employees in private households employing staff;
- (d) employees of overseas embassies, consulates, etc;
- (e) employees based outside Australia;
- (f) employees on workers' compensation who are not paid through the payroll;
- (g) directors who are not paid a salary;
- (h) proprietors/partners of unincorporated businesses;
- (i) self employed persons such as subcontractors, owner/drivers; consultants and persons paid solely by commission without a retainer.

##### Survey design

6. A sample of approximately 4,300 employers is selected from the ABS register of businesses to ensure adequate State and industry representation. The sample is updated each quarter to take account of new businesses, those which have ceased operation and structural changes such as takeovers and mergers. The statistical unit for the survey comprises all activities of an enterprise in a particular State or Territory. Each statistical unit is classified to an industry which reflects the predominant activity of the enterprise in the State or Territory. In a small number of cases where an enterprise has significant employment in more than one industry, a separate statistical unit is created for each industry. The statistical units are stratified by State, industry and size of employment and a simple random sample selected from each stratum.

##### Definitions

7. *Reference period* for the survey is the last pay period ending on or before the third Friday of the middle month of the quarter. For the most recent survey this date was 18 May 1984.



8. *Overtime* is time worked in excess of award, standard or agreed hours of work for which payment is received. Excluded is any overtime for which employees would not receive payment, e.g. unpaid overtime worked by managerial, executive, etc., staff, normal shiftwork and standard hours paid for at penalty rates.

9. *Overtime hours* represent the number of hours of overtime paid for. Respondents are instructed not to convert overtime hours to their ordinary time equivalent. For example, 100 hours of overtime paid for at time and a half and 20 hours at double time would be counted as 120 hours, not 190. For the new survey, overtime is defined in respect of hours paid for compared to hours worked in the previous surveys, a change in definition which is not expected to affect the estimates significantly.

10. *Average hours of overtime per employee working overtime* is calculated by dividing total overtime hours paid for in a particular group (e.g. industry, State or Territory) by the number of employees who were paid for overtime in the same group.

11. *Average hours of overtime per employee in the survey* is calculated by dividing total overtime hours paid for in a particular group by the total number of employees in the same group (including those who were not paid for any overtime).

12. *Number of employees* is the number on the payroll on the last day of the pay period ending on or before the survey date. Included are persons on paid leave (recreation leave, sick leave, long service leave, etc.). Excluded are persons on leave without pay, and persons on strike, locked out or stood down as a result of an industrial dispute, for the whole of the reference period.

#### Reliability of estimates

13. As the estimates in this publication are based on information relating to a sample of employers rather than a full enumeration, they are subject to sampling variability. That is, they may differ from the figures that would have been produced if the information had been obtained from all employers. This difference, called *sampling error*, should not be confused with inaccuracy that may occur because of imperfections in reporting by respondents or in processing by ABS; such inaccuracy is referred to as *non-sampling error* and may occur in any enumeration, whether it be a full count or sample. Efforts have been made to reduce non-sampling error by careful design of questionnaires, detailed checking of returns and quality control of processing.

14. The sampling error associated with any estimate can be estimated from the sample results. One measure of sampling error is given by the *standard error* which indicates the degree to which an estimate may vary from the value that would have been obtained from a full enumeration (the 'true' figure). There are about two chances in three that a sample estimate differs from the true value by less than one standard error, and about nineteen chances in twenty that the difference will be less than two standard errors.

15. If the standard error of an estimate is large relative to the size of the estimate, this detracts seriously from the usefulness of that estimate.

16. An example of the use of standard error for the May 1984 estimates is as follows. Table 1 shows the estimated average overtime hours per employee in the survey for Australia for May 1984 is 1.11 with a standard error of 0.04. Therefore there are about two chances in three that a full enumeration would have given a figure in the range 1.07 to 1.15 and about nineteen chances in twenty that it would be in the range 1.03 to 1.19.

#### Industry classification

17. Industry is classified according to the *Australian Standard Industrial Classification (ASIC) 1978 Edition, Volume 1—The Classification* (1201.0).

#### Seasonal Factors

18. Overtime figures at different dates may be affected by seasonal influences. Publication of seasonally adjusted figures will not be possible until results of surveys for several years are available.

#### Related publications

19. Users may also wish to refer to the following publications which are available on request:

*Information Paper: New Statistical Series: Employment, Average Weekly Earnings, Job Vacancies and Overtime* (6256.0)

*Average Weekly Earnings, States and Australia* (6302.0)—issued quarterly

*Job Vacancies, Australia* (6231.0)—issued quarterly

*The Labour Force, Australia* (6203.0)—issued monthly

*Employed Wage and Salary Earners, Australia*, (6248.0)—issued quarterly.

20. Current publications produced by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0). The ABS also issues, on Tuesdays and Fridays, a *Publications Advice* (1105.0) which lists publications to be released in the next few days. The Catalogue and Publications Advice are available from any ABS office.

#### Symbols

- \* subject to sampling variability too high for most practical purposes.

**R. J. CAMERON**  
Australian Statistician

TABLE 1. OVERTIME: STATES AND TERRITORIES

| Month  | N.S.W. | Vic.  | Qld   | S.A.  | W.A.  | Tas.  | N.T.  | A.C.T. | Aust. |
|--|--------|-------|-------|-------|-------|-------|-------|--------|-------|
| AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE IN THE SURVEY(a)    |        |       |       |       |       |       |       |        |       |
| 1983—  |        |       |       |       |       |       |       |        |       |
| February   | 1.12   | 1.23  | 1.05  | 0.89  | 1.38  | 1.17  | 1.77  | 0.66   | 1.14  |
| May  | 1.06   | 1.32  | 1.23  | 1.11  | 1.40  | 1.14  | 1.53  | 0.80   | 1.19  |
| August   | 1.15   | 1.39  | 1.10  | 0.90  | 1.36  | 1.00  | 1.96  | 0.75   | 1.20  |
| November—old(b)  | 1.21   | 1.54  | 1.47  | 1.05  | 1.60  | 1.15  | 1.59  | 0.72   | 1.34  |
| —new(c)  | 1.03   | 1.23  | 0.97  | 1.20  | 1.03  | 0.94  | 1.74  | 0.78   | 1.09  |
| 1984—  |        |       |       |       |       |       |       |        |       |
| February   | 0.97   | 1.24  | 0.89  | 1.15  | 0.99  | 1.02  | 1.73  | 0.76   | 1.05  |
| May  | 1.01   | 1.30  | 1.10  | 1.08  | 1.02  | 1.02  | 1.53  | 0.75   | 1.11  |
| Standard error(d)  | 0.04   | 0.09  | 0.12  | 0.05  | 0.06  | 0.05  | 0.14  | 0.06   | 0.04  |
| AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE WORKING OVERTIME(a) |        |       |       |       |       |       |       |        |       |
| 1983—  |        |       |       |       |       |       |       |        |       |
| February   | 6.56   | 7.37  | 5.93  | 6.45  | 7.19  | 7.55  | 8.35  | 6.01   | 6.78  |
| May  | 6.51   | 7.26  | 6.65  | 7.01  | 7.02  | 6.68  | 7.33  | 6.58   | 6.85  |
| August   | 6.60   | 7.64  | 5.99  | 5.80  | 7.13  | 6.53  | 8.21  | 5.92   | 6.80  |
| November—old(b)  | 6.63   | 7.78  | 7.17  | 5.99  | 7.42  | 6.92  | 7.88  | 5.86   | 7.06  |
| —new(c)  | 6.51   | 7.17  | 6.46  | 6.50  | 6.23  | 6.15  | 8.07  | 5.84   | 6.66  |
| 1984—  |        |       |       |       |       |       |       |        |       |
| February   | 6.58   | 7.47  | 5.73  | 6.73  | 6.20  | 6.44  | 8.88  | 6.07   | 6.70  |
| May  | 6.65   | 7.14  | 6.49  | 6.39  | 6.14  | 6.38  | 8.32  | 5.91   | 6.71  |
| Standard error(d)  | 0.16   | 0.23  | 0.44  | 0.21  | 0.26  | 0.20  | 0.39  | 0.28   | 0.12  |
| PERCENTAGE OF EMPLOYEES IN THE SURVEY WORKING OVERTIME(a)      |        |       |       |       |       |       |       |        |       |
| 1983—  |        |       |       |       |       |       |       |        |       |
| February   | 17.04  | 16.74 | 17.78 | 13.80 | 19.26 | 15.51 | 21.26 | 11.02  | 16.82 |
| May  | 16.36  | 18.18 | 18.50 | 15.81 | 19.89 | 17.00 | 20.89 | 12.12  | 17.36 |
| August   | 17.36  | 18.20 | 18.37 | 15.46 | 19.03 | 15.38 | 23.92 | 12.62  | 17.59 |
| November—old(b)  | 18.20  | 19.78 | 20.46 | 17.52 | 21.61 | 16.59 | 20.23 | 12.30  | 19.02 |
| —new(c)  | 15.89  | 17.16 | 14.99 | 18.40 | 16.57 | 15.31 | 23.55 | 13.19  | 16.34 |
| 1984—  |        |       |       |       |       |       |       |        |       |
| February   | 14.79  | 16.72 | 15.62 | 16.99 | 15.89 | 16.02 | 20.35 | 12.42  | 15.73 |
| May  | 15.13  | 18.21 | 17.01 | 16.82 | 16.67 | 16.01 | 18.43 | 12.64  | 16.52 |
| Standard error(d)  | 0.61   | 1.00  | 1.07  | 0.71  | 0.73  | 0.66  | 1.33  | 0.93   | 0.40  |

(a) For definitions see paragraphs 7 to 12. (b) Result from payroll tax based sample. See paragraphs 2 to 4. (c) Result of sample from ABS register. See paragraphs 2 to 4. (d) Standard error for latest estimate. See paragraphs 13 to 16.

TABLE 2. AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE IN THE SURVEY(a): MANUFACTURING

| Month             | N.S.W. | Vic. | Qld  | S.A. | W.A. | Tas. | N.T. | A.C.T. | Aust. |
|-------------------|--------|------|------|------|------|------|------|--------|-------|
| 1983—             |        |      |      |      |      |      |      |        |       |
| February          | 1.54   | 1.77 | 1.26 | 1.39 | 1.94 | 1.73 | 1.64 | 1.53   | 1.61  |
| May               | 1.60   | 2.04 | 1.90 | 1.33 | 1.61 | 1.97 | 2.45 | 1.26   | 1.77  |
| August            | 1.80   | 2.39 | 1.68 | 1.37 | 2.02 | 1.78 | 3.24 | 1.44   | 1.97  |
| November—old(b)   | 2.08   | 2.96 | 2.09 | 1.81 | 2.26 | 2.38 | 3.02 | 2.10   | 2.39  |
| —new(c)           | 2.22   | 2.63 | 1.47 | 2.00 | 1.53 | 1.98 | *    | *      | 2.19  |
| 1984—             |        |      |      |      |      |      |      |        |       |
| February          | 1.98   | 2.81 | 1.23 | 2.26 | 1.64 | 2.10 | 1.36 | *      | 2.16  |
| May               | 2.01   | 2.62 | 1.55 | 2.04 | 2.04 | 2.22 | 3.89 | 2.13   | 2.17  |
| Standard error(d) | 0.13   | 0.17 | 0.14 | 0.10 | 0.17 | 0.13 | 0.32 | 0.27   | 0.08  |

(a) For definitions see paragraphs 7 to 12. (b) Result from payroll tax based sample. See paragraphs 2 to 4. (c) Result of sample from ABS register. See paragraphs 2 to 4. (d) Standard error for latest estimate. See paragraphs 13 to 16.

TABLE 3. OVERTIME BY INDUSTRY

| Industry   | February<br>1983 | May<br>1983 | August<br>1983 | November 1983<br>old(a) new(b) | February<br>1984(b) | May<br>1984(b) | Standard<br>error(c) |
|--|------------------|-------------|----------------|--------------------------------|---------------------|----------------|----------------------|
| AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE IN THE SURVEY(d)    |                  |             |                |                                |                     |                |                      |
| Mining   | 3.71             | 3.78        | 3.71           | 4.08                           | *                   | 3.67           | 0.24                 |
| Manufacturing  | 1.61             | 1.77        | 1.97           | 2.39                           | 2.19                | 2.16           | 0.08                 |
| Food, beverages and tobacco                                    | 2.61             | 2.05        | 2.45           | 2.95                           | 2.45                | 2.45           | 0.10                 |
| Textiles, clothing and footwear                                | 1.55             | 2.22        | 2.43           | 2.69                           | 2.23                | 2.59           | 0.48                 |
| Paper, printing, etc.  | 1.40             | 1.34        | 1.57           | 1.86                           | 1.56                | 1.15           | 0.12                 |
| Chemical, petroleum and coal products                          | 1.34             | 1.72        | 1.43           | 1.79                           | 2.00                | 1.43           | 0.23                 |
| Basic metal products   | 1.53             | 2.15        | 2.57           | 3.06                           | 2.75                | 3.23           | 0.10                 |
| Fabricated metal products; other machinery, etc.               | 1.18             | 1.76        | 1.68           | 2.07                           | 2.33                | 2.14           | 0.26                 |
| Transport equipment  | 0.94             | 1.05        | 1.34           | 1.95                           | 1.93                | 1.88           | 0.10                 |
| Other manufacturing  | 1.88             | 1.80        | 2.13           | 2.53                           | 1.99                | 2.22           | 0.17                 |
| Electricity, gas and water                                     | 1.69             | 1.73        | 1.59           | 1.61                           | 1.50                | 1.48           | 0.03                 |
| Construction   | 1.93             | 1.91        | 1.88           | 1.86                           | 1.56                | 1.36           | 0.15                 |
| Wholesale trade  | 0.98             | 1.06        | 0.86           | 1.10                           | 1.07                | 0.95           | 0.09                 |
| Retail trade   | 0.65             | 0.69        | 0.70           | 0.77                           | 0.57                | 0.57           | 0.01                 |
| Transport and storage; communication                           | 1.98             | 2.04        | 1.98           | 2.20                           | 1.90                | 1.77           | 0.17                 |
| Public administration; community services                      | 0.49             | 0.53        | 0.51           | 0.53                           | 0.43                | 0.39           | 0.04                 |
| Other  | 0.63             | 0.61        | 0.59           | 0.56                           | *                   | 0.38           | 0.13                 |
| All industries   | 1.14             | 1.19        | 1.20           | 1.34                           | 1.09                | 1.05           | 0.04                 |
| AVERAGE WEEKLY OVERTIME HOURS PER EMPLOYEE WORKING OVERTIME(d) |                  |             |                |                                |                     |                |                      |
| Mining   | 8.15             | 8.35        | 8.36           | 8.96                           | 8.85                | 8.28           | 0.29                 |
| Manufacturing  | 7.42             | 7.48        | 7.71           | 7.99                           | 7.82                | 7.98           | 0.18                 |
| Food, beverages and tobacco                                    | 7.69             | 6.66        | 7.04           | 7.71                           | 6.92                | 7.31           | 0.24                 |
| Textiles, clothing and footwear                                | 9.53             | 10.46       | 9.40           | 10.05                          | 8.58                | 8.25           | 1.05                 |
| Paper, printing, etc.  | 7.21             | 6.49        | 7.06           | 7.43                           | 6.92                | 5.87           | 0.23                 |
| Chemical, petroleum and coal products                          | 7.81             | 7.37        | 6.95           | 6.92                           | 7.61                | 7.83           | 0.79                 |
| Basic metal products   | 6.31             | 7.34        | 7.58           | 8.51                           | 8.97                | 9.13           | 0.24                 |
| Fabricated metal products; other machinery, etc.               | 6.54             | 7.70        | 7.47           | 7.50                           | 8.85                | 8.38           | 0.48                 |
| Transport equipment  | 8.33             | 7.33        | 8.22           | 8.62                           | 8.05                | 7.71           | 0.10                 |
| Other manufacturing  | 7.29             | 7.46        | 8.53           | 7.87                           | 7.03                | 8.52           | 0.43                 |
| Electricity, gas and water                                     | 7.67             | 7.85        | 7.21           | 7.40                           | 6.89                | 6.99           | 0.07                 |
| Construction   | 7.74             | 8.15        | 8.17           | 7.61                           | 7.78                | 7.56           | 0.40                 |
| Wholesale trade  | 6.43             | 6.25        | 5.79           | 6.20                           | 5.85                | 6.40           | 0.36                 |
| Retail trade   | 4.02             | 3.93        | 3.86           | 3.99                           | 3.91                | 3.91           | 0.19                 |
| Transport and storage; communication                           | 6.75             | 7.39        | 7.09           | 7.17                           | 7.04                | 6.84           | 0.35                 |
| Public administration; community services                      | 6.77             | 6.82        | 6.69           | 7.38                           | 5.61                | 5.59           | 0.31                 |
| Other  | 5.73             | 5.18        | 5.05           | 5.09                           | 5.52                | 5.08           | 0.66                 |
| All industries   | 6.78             | 6.85        | 6.80           | 7.06                           | 6.66                | 6.70           | 0.12                 |
| PERCENTAGE OF EMPLOYEES IN THE SURVEY WORKING OVERTIME(d)      |                  |             |                |                                |                     |                |                      |
| Mining   | 45.46            | 45.28       | 44.36          | 45.59                          | 42.37               | 44.28          | 1.92                 |
| Manufacturing  | 21.67            | 23.70       | 25.49          | 29.90                          | 28.09               | 27.07          | 0.77                 |
| Food, beverages and tobacco                                    | 33.97            | 30.82       | 34.79          | 38.24                          | 35.37               | 33.63          | 1.82                 |
| Textiles, clothing and footwear                                | 16.32            | 21.21       | 25.81          | 26.81                          | 26.98               | 31.32          | 3.58                 |
| Paper, printing, etc.  | 19.48            | 20.65       | 22.17          | 25.08                          | 22.56               | 19.51          | 1.93                 |
| Chemical, petroleum and coal products                          | 17.11            | 23.36       | 20.63          | 25.87                          | 26.31               | 18.29          | 1.47                 |
| Basic metal products   | 24.26            | 29.29       | 33.89          | 36.02                          | 30.62               | 36.06          | 0.89                 |
| Fabricated metal products; other machinery, etc.               | 18.12            | 22.88       | 22.46          | 27.64                          | 26.22               | 25.51          | 2.34                 |
| Transport equipment  | 11.29            | 14.30       | 16.27          | 22.59                          | 24.47               | 24.28          | 1.30                 |
| Other manufacturing  | 25.77            | 24.15       | 24.96          | 32.10                          | 28.33               | 25.97          | 1.77                 |
| Electricity, gas and water                                     | 22.00            | 21.99       | 22.12          | 21.68                          | 21.70               | 21.11          | 0.39                 |
| Construction   | 24.94            | 23.42       | 22.97          | 24.41                          | 20.04               | 18.04          | 2.03                 |
| Wholesale trade  | 15.22            | 16.98       | 14.89          | 17.67                          | 18.33               | 14.68          | 1.43                 |
| Retail trade   | 16.10            | 17.43       | 18.21          | 19.25                          | 14.49               | 14.73          | 1.25                 |
| Transport and storage; communication                           | 29.26            | 27.60       | 27.93          | 30.72                          | 26.91               | 26.06          | 1.47                 |
| Public administration; community services                      | 7.24             | 7.72        | 7.60           | 7.18                           | 7.70                | 6.91           | 0.56                 |
| Other  | 10.94            | 11.75       | 11.65          | 10.94                          | 8.17                | 7.40           | 1.41                 |
| All industries   | 16.82            | 17.36       | 17.59          | 19.02                          | 16.34               | 15.74          | 0.40                 |

(a) Result from payroll tax based survey. See paragraphs 2 to 4. (b) Result of sample from ABS register. See paragraphs 2 to 4. (c) Standard error for latest estimate. See paragraphs 13 to 16. (d) For definitions see paragraphs 7 to 12.

## NEW STATISTICAL SERIES : EMPLOYED WAGE AND SALARY EARNERS, AUSTRALIA (6248.0)

The first results of the new quarterly Survey of Employment and Earnings which was introduced in the September quarter 1983 were published on 29 June 1984.

This publication contains estimates for Australia, States and Territories of all *employees*, male and female, classified by industry and private or government. The estimates are obtained from a survey conducted each quarter from a sample of 20,000 private employers and all government employers. The new series replaces the Civilian Employees series, based principally on information obtained from payroll tax returns, which was discontinued after April 1980.

Details of government sector employees previously published in *The Labour Force, Australia* (6203.0) will now be available in the new publication.

An *Information Paper : New Statistical Series : Employment, Average Weekly Earnings, Job Vacancies and Overtime* describes the conceptual and methodological changes associated with the new series. (Copies of this Information Paper were distributed with the release of *Average Weekly Earnings, Australia, March Quarter 1984 (Preliminary)* (6301.0) on 21 June 1984; *Job Vacancies, Australia, February 1984* (6231.0) and *Overtime, Australia, February 1984* (6330.0) on June 25 1984.)

If you would like to receive a copy of the new publications please complete the order form below.

### ORDER

(Please indicate your requirements ☒)

To:

Mailing List Service  
Information Services  
Australian Bureau of Statistics  
P.O. Box 10  
BELCONNEN A.C.T. 2616

- 1 ☐ Employed Wage and Salary Earners, Australia, (Catalogue No. 6248.0).

..... copies per issue

- 2 ☐ Please forward.....copies of Information Paper (Catalogue No. 6256.0).

NAME .....

POSITION .....

ORGANISATION.....

ADDRESS.....

..... POSTCODE.....

My ABS ACCOUNT NUMBER (top left corner of address label) is—

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

|  |  |
|--|--|
|  |  |
|--|--|